

Commonwealth of Kentucky
Natural Resources and Environmental Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

AIR QUALITY PERMIT

Permittee Name: Leestown Company, Inc.
Mailing Address: PO Box 619, Frankfort, Kentucky 40602

is authorized to operate a distilled spirits manufacturing plant

Source Name: Same as above
Mailing Address: Same as above
Source Location: Leestown Road, Frankfort, Kentucky

Permit Type: Federally-Enforceable
Review Type: Title V

Permit Number: V-98-032
Log Number: F470
Application
Complete Date: February 12, 1998
KYEIS ID #: 102-1320-0009
AFS Plant ID #: 21-073-00009
SIC Code: 2085

Region: Bluegrass
County: Franklin

Issuance Date:
Expiration Date:

John E. Hornback, Director
Division for Air Quality

TABLE OF CONTENTS

<u>SECTION</u>		<u>DATE OF ISSUANCE</u>	<u>PAGE</u>
SECTION A	PERMIT AUTHORIZATION		1
SECTION B	EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS		2
SECTION C	INSIGNIFICANT ACTIVITIES		23
SECTION D	SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS		24
SECTION E	SOURCE CONTROL EQUIPMENT OPERATING REQUIREMENTS		25
SECTION F	MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS		26
SECTION G	GENERAL CONDITIONS		29
SECTION H	ALTERNATE OPERATING SCENARIOS	32	
SECTION I	COMPLIANCE SCHEDULE		32

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application which was determined to be complete on February 12, 1998 the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This draft permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any emissions units without first having submitted a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in the Regulation 401 KAR 50:035, Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 01 (01-001, 01-002, 01-005 & 03-005) Grain And Distiller's Dried Grain Handling

Description:

Equipment includes: Grain unloading/receiving hopper with enclosure, conveyors, bucket elevators, distiller's dried grain conveying, storage, and loadout

(01-001 and 01-002) Maximum operating rate for grain loading/conveyor: 56 tons/hr

Construction commenced: 1974

(01-005) Maximum operating rate for hammermill conveyor: 25.2 tons/hr

Construction commenced: 1974

(03-005) Maximum operating rate for distiller's dried grain loading: 33 tons/hr

Construction commenced on or before 1969

APPLICABLE REGULATIONS:

Regulation 401 KAR 63:010, Fugitive Emissions

Applicable Requirements:

- a) Pursuant to Regulation 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not limited to the installation and utilization of hoods, fans, and fabric filters to enclose and vent the emissions generated from the processing of dust generating materials, or use of water sprays or other measures to suppress the dust emissions during handling.
- b) Pursuant to Regulation 401 KAR 63:010, Section 3, discharge of visible fugitive emissions beyond the property line is prohibited.

1. Operating Limitations:

None

2. Emission Limitations:

None

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

- a) The permittee shall monitor the amount of grain received and processed on a monthly basis.
- b) The permittee shall monitor the amount of distiller's dried grain processed on a monthly basis.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

5. Specific Record Keeping Requirements:

- a) Records of grain received and processed shall be maintained on a monthly basis.
- b) Records of distiller's dried grain processed shall be maintained on a monthly basis.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

- a) The enclosures used to control fugitive emissions shall be operated as necessary to maintain compliance with applicable requirements in accordance with manufacturer's specifications and/or standard operating practices.
- b) Records regarding the maintenance of the control equipment shall be maintained.
- c) See Section E.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

Emissions Unit 02 (01-006) Hammer Mill and Receiver Process Cyclone

Description:

Equipment: Hammer mill and receiver process cyclone
Maximum operating rate: 25.2 tons/hr milled grain
Construction commenced on or before 1969

APPLICABLE REGULATIONS:

Regulation 401 KAR 61:020, Existing process operations, applicable to an emission unit that commenced prior to July 2, 1975.

1. Operating Limitations:

See Section D.

2. Emission Limitations:

- a) Pursuant to Regulation 401 KAR 61:020, Section 3(2)(a), particulate emissions into the open air shall not exceed $[4.10(P)^{0.67}]$ lbs/hour for based on a three-hour-average where P is the processing rate in tons/hour. Compliance with the allowable particulate standard may be demonstrated by calculating particulate emissions using grain processing rate and emission factor information as follows:

PM Emissions (lbs/hour) from grain handling = (0.12 lbs/ton which is the AP-42 emission factor)(grain processing averaged weekly in tons/hour)

- b) Pursuant to Regulation 401 KAR 61:020, Section 3(1)(a), visible emissions shall not equal or exceed 40% opacity based on a six-minute-average.

3. Testing Requirements:

The permittee shall determine the opacity of emissions from the stack using US EPA Reference Method 9 annually, or more frequently if requested by the Division.

4. Specific Monitoring Requirements:

- a) The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis and maintain a log of the observations. If visible emissions from the stack are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by U.S. EPA Reference Method 9 and instigate an inspection of the control equipment for any necessary repairs.
- b) The permittee shall monitor the grain processing rate and hours of operation on a weekly basis.
- c) See Section D.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

5. Specific Record Keeping Requirements:

- a) Records of grain processed and hours of operation shall be maintained on a weekly basis.
- b) See Section D.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:
NA

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

Emissions Unit 03 (02-001 and 02-005) Fermentation Process

Description:

Equipment includes: Fermentation and distilling process
Construction commenced on or before 1969

APPLICABLE REGULATIONS:

None

1. Operating Limitations:

None

2. Emission Limitations:

None

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

The permittee shall monitor the proof gallons produced on a monthly basis.

5. Specific Record Keeping Requirements:

Records of proof gallons produced shall be maintained on a monthly basis.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

None

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

Emissions Unit 04 (03-001) Rotary Dryer

Description:

Equipment: Rotary steam tube dryer

Control equipment: Cyclone

Maximum operating rate: 23.6 tons/hr distiller's dried grain

Construction commenced: 1976

APPLICABLE REGULATIONS:

Regulation 401 KAR 59:010, New process operations, applicable to an emission unit that commenced on or after July 2, 1975.

1. Operating Limitations:

See Section D.

2. Emission Limitations:

- a) Pursuant to Regulation 401 KAR 59:010, Section 3(2), particulate emissions into the open air shall not exceed $[3.59(P)^{0.62}]$ lbs/hour based on a three-hour-average where P is the processing rate in tons/hour. Compliance with the allowable particulate standard may be demonstrated by calculating particulate emissions using grain processing rate, emission factor information, and cyclone control efficiency as follows:

PM Emissions (lbs/hour) from grain drying = (1.05 lb/ton which is the AP-42 emission factor with the cyclone control efficiency factored in)(grain processing averaged weekly in tons/hour)

- b) Pursuant to Regulation 401 KAR 59:010, Section 3(1)(a), any continuous emissions into the open air shall not equal or exceed 20% opacity based on a six-minute-average.

3. Testing Requirements:

The permittee shall determine the opacity of emissions from the stack using US EPA Reference Method 9 annually, or more frequently if requested by the Division.

4. Specific Monitoring Requirements:

- a) The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis and maintain a log of the observations. If visible emissions from the stack are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by U.S. EPA Reference Method 9 and instigate an inspection of the control equipment for any necessary repairs.
- b) The permittee shall monitor the grain processing rate and hours of operation on a weekly basis.
- c) See Section D.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

5. Specific Record Keeping Requirements:

- a) Records of weekly grain processed and weekly hours of operation shall be maintained.
- b) See Section D.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

- a) The cyclone shall be operated as necessary to maintain compliance with permitted emission limitations in accordance with manufacturer's specifications and/or standard operating practices.
- b) Records regarding the maintenance of the cyclone shall be maintained.
- c) See Section E.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

Emissions Unit 05 (03-002 and 03-003) Three Rotary Dryers And Cyclone Separator

Description:

Equipment: Three rotary steam tube dryers and pneumatic conveying cyclone separator

Control equipment: Cyclone

Maximum operating rate for dryers (total): 12.6 tons/hr distiller's dried grain

Construction commenced on or before 1969

Maximum operating rate for cyclone separator: 4.25 tons/hr distiller's dried grain

Construction commenced: 1973

APPLICABLE REGULATIONS:

Regulation 401 KAR 61:020, Existing process operations, applicable to an emission unit that commenced prior to July 2, 1975.

1. Operating Limitations:

See Section D.

2. Emission Limitations:

- a) Pursuant to Regulation 401 KAR 61:020, Section 3(2)(a), particulate emissions into the open air shall not exceed $[4.10(P)^{0.67}]$ lbs/hour based on a three-hour-average where P is the processing rate in tons/hour. Compliance with the allowable particulate standard may be demonstrated by calculating particulate emissions using grain processing rate, emission factor information, and cyclone control efficiency as follows:

PM Emissions (lbs/hour) from grain drying = (1.05 lb/ton which is the AP-42 emission factor with the cyclone control efficiency factored in)(grain processing averaged weekly in tons/hour)

- b) Pursuant to Regulation 401 KAR 61:020, Section 3(1)(a), visible emissions shall not equal or exceed 40% opacity based on a six-minute-average.

3. Testing Requirements:

The permittee shall determine the opacity of emissions from the stack using US EPA Reference Method 9 annually, or more frequently if requested by the Division.

4. Specific Monitoring Requirements:

- a) The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis and maintain a log of the observations. If visible emissions from the stack are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by U.S. EPA Reference Method 9 and instigate an inspection of the control equipment for any necessary repairs.
- b) The permittee shall monitor the grain processing rate and hours of operation on a weekly basis.
- c) See Section D.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

5. Specific Record Keeping Requirements:

- a) Records of weekly grain processed and hours of operation shall be maintained.
- b) See Section D.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

- a) The cyclone shall be operated as necessary to maintain compliance with permitted emission limitations in accordance with manufacturer's specifications and/or standard operating practices.
- b) Records regarding the maintenance of the cyclone shall be maintained.
- c) See Section E.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

Emissions Unit 06 (05-001) Barrel Filling, Aging, and Dumping

Description:

Equipment includes: Barrel filling stations, product aging in warehouses, and barrel dumping
Construction commenced on or before 1969

APPLICABLE REGULATIONS:

None

1. Operating Limitations:

None

2. Emission Limitations:

None

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

The permittee shall monitor the number of barrels stored on a yearly basis.

5. Specific Record Keeping Requirements:

A record of the number of barrels stored on a yearly basis.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

None

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

Emissions Unit 07 (06-001 through 06-003, 07-001 and 07-003, and 08-001) Processing And Bottling Operations

Description:

Equipment includes: Holding, processing, & bottling tanks(06-001 through 06-003); bottle filling and pipeline component(07-001 and 07-003) & peripheral equipment(08-001).
Construction commenced on or before 1969

APPLICABLE REGULATIONS:

None

1. Operating Limitations:

None

2. Emission Limitations:

None

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

The permittee shall monitor the proof gallons processed on a yearly basis.

5. Specific Record Keeping Requirements:

Records of the proof gallons processed shall be maintained on a yearly basis.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

None

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

Emissions Unit 08 (09-001) Indirect Heat Exchanger

Description:

Horizontally-opposed-waste-oil-fired indirect heat exchanger

Secondary fuel: Distillate oil (#2 and #4 fuel oil)

Tertiary fuel: Natural gas

Maximum continuous rating: 176 MMBtu/hr

Construction commenced: May 1972

APPLICABLE REGULATIONS:

Regulation 401 KAR 59:015, New indirect heat exchangers, applicable to an emissions unit with a capacity of less than 250 MMBtu/hour which commenced on or after April 9, 1972.

1. Operating Limitations:

See Section D.

2. Emission Limitations:

a) In order to ensure non-applicability of Regulation 401 KAR 51:017, Prevention of Significant Deterioration of Air Quality, particulate emissions shall not exceed 0.052 lb/MMBtu for each fuel based on a three-hour average.

The permittee may assure compliance with the particulate standard by calculating particulate emissions using the following formulas.

When combusting waste oil:

Particulate emission = $[(64 \times \text{percent ash in fuel lb}/10^3 \text{ gallon which is the AP-42 emission factor}) \text{ divided by } (\text{Heating value of waste oil in mmBtu}/10^3 \text{ gallon})]$

When combusting #2 fuel oil:

Particulate emission = $[(2 \text{ lbs}/10^3 \text{ gallon which is the AP-42 emission factor}) \text{ divided by } (\text{Heating value of fuel in mmBtu}/10^3 \text{ gallon})]$

When combusting #4 fuel oil:

Particulate emission = $[(7 \text{ lbs}/10^3 \text{ gallon which is the AP-42 emission factor}) \text{ divided by } (\text{Heating value of fuel in mmBtu}/10^3 \text{ gallon})]$

b) Pursuant to Regulation 401 KAR 59:015, Section 4(2), emissions shall not exceed 20% opacity based on a six minute average, except that a maximum of 40% opacity, based on a six minute average, shall be permissible for not more than six consecutive minutes in any consecutive 60 minutes during cleaning the fire-box or blowing soot.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

2. Emission Limitations: (Continued)

c) In order to ensure non-applicability of Regulation 401 KAR 51:017, Prevention of Significant Deterioration of Air Quality, sulfur dioxide emissions shall not exceed 0.75 lb/MMBtu based on a three hour average.

The permittee may assure compliance with the sulfur dioxide standard by calculating sulfur dioxide emissions using the following formulas.

When combusting waste oil:

Sulfur dioxide emissions = $[(147 \times \text{percent sulfur in fuel lb}/10^3 \text{ gallon which is the AP-42 emission factor}) \text{ divided by } (\text{Heating value of waste fuel oil in mmBtu}/10^3 \text{ gallon})]$

When combusting #2 fuel oil:

Sulfur dioxide emissions = $[(142 \times \text{percent sulfur in fuel lb}/10^3 \text{ gallon which is the AP-42 emission factor}) \text{ divided by } (\text{Heating value of fuel oil in mmBtu}/10^3 \text{ gallon})]$

When combusting #4 fuel oil:

Sulfur dioxide emissions = $[(150 \times \text{percent sulfur in fuel lb}/10^3 \text{ gallon which is the AP-42 emission factor}) \text{ divided by } (\text{Heating value of fuel oil in mmBtu}/10^3 \text{ gallon})]$

d) While burning natural gas, this unit is considered to be in compliance with the PM, SO₂, and opacity standards.

3. Testing Requirements:

a) The permittee shall determine the opacity of emissions from the stack using U.S. EPA Reference Method 9 annually, or more frequently if requested by the Division.

b) The permittee shall conduct at least one stack test for particulate emissions within the term of this permit.

4. Specific Monitoring Requirements:

a) The permittee shall monitor the heating value and sulfur content of each type of fuel oil combusted whenever a new shipment of fuel oil received. The permittee may use certification from the fuel supplier to satisfy this requirement.

b) The permittee shall monitor the amount of each type of fuel combusted on a monthly basis.

c). See Section D.

5. Specific Record Keeping Requirements:

a) The permittee shall maintain the records of the amount of each type of fuel combusted on a monthly basis.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

5. Specific Record Keeping Requirements: (Continued)

b) The permittee shall maintain the records of heating value and sulfur content for each type of fuel oil combusted on a monthly basis.

c) See Section D.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

None

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

Emissions Unit 09 (09-002) Indirect Heat Exchanger

Description:

Spreader stoker coal-fired indirect heat exchanger
Control equipment: Multicyclones
Maximum continuous rating: 126 MMBtu/hr
Construction commenced on or before 1969

APPLICABLE REGULATIONS:

Regulation 401 KAR 61:015, Existing indirect heat exchangers, applicable to an emissions unit with a capacity of less than 250 MMBtu/hour which commenced before April 9, 1972.

1. Operating Limitations:

See Section D.

2. Emission Limitations:

a) Pursuant to Regulation 401 KAR 61:015, Section 4(1), particulate emissions shall not exceed 0.42 lb/MMBtu based on a three-hour average.

The permittee may assure compliance with the particulate standard by calculating particulate emissions using the following formula:

Particulate emission = [(0.91 lb/ton which is the emission factor from most recent stack test with the cyclone control efficiency factored in) divided by (coal heating value in mmBtu/ton)]

b) Pursuant to Regulation 401 KAR 61:015, Section 4(3), emissions shall not exceed 40 percent opacity except that a maximum of sixty (60) percent opacity shall be permissible for not more than six (6) consecutive minutes in any sixty (60) consecutive minutes during cleaning the fire box or blowing soot.

c) In order to ensure non-applicability of Regulation 401 KAR 51:017, Prevention of Significant Deterioration of Air Quality, sulfur dioxide emissions shall not exceed 1.42 lb/MMBtu based on a twenty-four average.

The permittee may assure compliance with the sulfur dioxide standard by calculating sulfur dioxide emissions using the following formula.

Sulfur dioxide = [(38 x percent sulfur in coal lb/ton which is the AP-42 emission factor) divided by (coal heating value in mmBtu/ton)].

3. Testing Requirements:

a) The permittee shall perform at least one performance test for particulate emissions within two years from the issuance of this permit to demonstrate compliance with the particulate standard.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

3. Testing Requirements: (Continued)

b) When the unit is in operation, the permittee shall read, weather permitting, the opacity of emissions using U.S. EPA Reference Method 9 once per daylight shift.

4. Specific Monitoring Requirements:

a) The permittee shall monitor the heating value, ash and sulfur content of coal by performing analysis on each shipment of coal received.

b) In accordance with Regulation 401 KAR 61:015, Section 6 (3), the permittee shall monitor the amount of fuel combusted on a daily basis.

c) See Section D.

5. Specific Record Keeping Requirements:

a) The permittee shall maintain the records of the fuel analysis.

b) The permittee shall maintain the records of the amount of fuel combusted on a daily basis.

c) See Section D.

6. Specific Reporting Requirements:

a) See Section F.

7. Specific Control Equipment Operating Conditions:

a) The cyclone shall be operated as necessary to maintain compliance with the permitted emission limitations, in accordance with the manufacturer's specifications and / or good engineering practices.

b) Records regarding the maintenance and operation of the control equipment shall be maintained.

c) See Section E for further requirements.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

Emissions Unit 10 (09-003) Indirect Heat Exchanger

Description:

Horizontally-opposed-waste-oil-fired indirect heat exchanger

Secondary fuel: Distillate oil (#2 and #4 fuel oil)

Tertiary fuel: Natural gas

Maximum continuous rating: 63 MMBtu/hr

Construction commenced: May 1972

APPLICABLE REGULATIONS:

Regulation 401 KAR 59:015, New indirect heat exchangers, applicable to an emissions unit with a capacity of less than 250 MMBtu/hour which commenced on or after April 9, 1972.

1. Operating Limitations:

See Section D.

2. Emission Limitations:

a) In order to ensure non-applicability of Regulation 401 KAR 51:017, Prevention of Significant Deterioration of Air Quality, particulate emissions shall not exceed 0.052 lb/MMBtu for each fuel based on a three-hour average.

The permittee may assure compliance with the particulate standard by calculating particulate emissions using the following formulas.

When combusting waste oil:

Particulate emission = $[(64 \times \text{percent ash in fuel}) \text{ lb}/10^3 \text{ gallon which is the AP-42 emission factor}] \text{ divided by } (\text{Heating value of waste oil in mmBtu}/10^3 \text{ gallon})]$

When combusting #2 fuel oil:

Particulate emission = $[(2 \text{ lbs}/10^3 \text{ gallon which is the AP-42 emission factor}) \text{ divided by } (\text{Heating value of fuel in mmBtu}/10^3 \text{ gallon})]$

When combusting #4 fuel oil:

Particulate emission = $[(7 \text{ lbs}/10^3 \text{ gallon which is the AP-42 emission factor}) \text{ divided by } (\text{Heating value of fuel in mmBtu}/10^3 \text{ gallon})]$

b) Pursuant to Regulation 401 KAR 59:015, Section 4(2), emissions shall not exceed 20% opacity based on a six minute average, except that a maximum of 40% opacity, based on a six minute average, shall be permissible for not more than six consecutive minutes in any consecutive 60 minutes during cleaning the fire-box or blowing soot.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Limitations: (Continued)

c) In order to ensure non-applicability of Regulation 401 KAR 51:017, Prevention of Significant Deterioration of Air Quality, sulfur dioxide emissions shall not exceed 0.75 lb/MMBtu based on a three hour average.

The permittee may assure compliance with the sulfur dioxide standard by calculating sulfur dioxide emissions using the following formulas.

When combusting waste oil:

Sulfur dioxide emissions = $[(147 \times \text{percent sulfur in fuel lb}/10^3 \text{ gallon which is the AP-42 emission factor}) \div (\text{Heating value of waste fuel oil in mmBtu}/10^3 \text{ gallon})]$

When combusting #2 fuel oil:

Sulfur dioxide emissions = $[(142 \times \text{percent sulfur in fuel lb}/10^3 \text{ gallon which is the AP-42 emission factor}) \div (\text{Heating value of fuel oil in mmBtu}/10^3 \text{ gallon})]$

When combusting #4 fuel oil:

Sulfur dioxide emissions = $[(150 \times \text{percent sulfur in fuel lb}/10^3 \text{ gallon which is the AP-42 emission factor}) \div (\text{Heating value of fuel oil in mmBtu}/10^3 \text{ gallon})]$

d) While burning natural gas, this unit is considered to be in compliance with the PM, SO₂, and opacity standards.

3. Testing Requirements:

The permittee shall determine the opacity of emissions from the stack using U.S. EPA Reference Method 9 annually, or more frequently if requested by the Division.

4. Specific Monitoring Requirements:

a) The permittee shall monitor the heating value and sulfur content of each type of fuel oil combusted whenever a new shipment of fuel oil received. The permittee may use certification from the fuel supplier to satisfy this requirement.

b) The permittee shall monitor the amount of each type of fuel combusted on a monthly basis.

c) See Section D.

5. Specific Record Keeping Requirements:

a) The permittee shall maintain the records of the amount of each type of fuel combusted on a monthly basis.

b) The permittee shall maintain the records of heating value and sulfur content for each type of fuel oil.

c) See Section D.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

None

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 11 (12-001) Wastewater Treatment Process

Description:

Equipment includes: Wastewater treatment system
Construction commenced: 1974

APPLICABLE REGULATIONS:

None

1. Operating Limitations:

None

2. Emission Limitations:

None

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

The permittee shall monitor the gallons of wastewater treated on a yearly basis.

5. Specific Record Keeping Requirements:

Records of the gallons of wastewater treated shall be maintained on a yearly basis.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

None

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

Emissions Unit 12 (13-001) Cooling Tower

Description:

Maximum operating rate: 156,000 gals/yr of water
Construction commenced: 1974

APPLICABLE REGULATIONS:

Regulation 401 KAR 63:010, Fugitive Emissions

Applicable Requirements:

- a) Pursuant to Regulation 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not limited to the installation and utilization of hoods, fans, and fabric filters to enclose and vent the emissions generated from the processing of dust generating materials, or use of water sprays or other measures to suppress the dust emissions during handling.
- b) Pursuant to Regulation 401 KAR 63:010, Section 3, discharge of visible fugitive emissions beyond the property line is prohibited.

1. Operating Limitations:

None

2. Emission Limitations:

None

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

The permittee shall monitor the gallons of water used on a yearly basis.

5. Specific Record Keeping Requirements:

Records of the gallons of water used shall be maintained on a yearly basis.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

NA

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to Regulation 401 KAR 50:035, Section 5(4). While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

Application

<u>Emission Point No.</u>	<u>Description</u>	<u>Generally Applicable Regulation</u>
01-003	Grain Cleaner Receiver Cyclone	401 KAR 61:020
01-004	Grain Bin Loading	401 KAR 59:010
01-007	Meal Bin Loading	401 KAR 61:020
02-002	Beer Well	NA
02-003	Vent Condenser	NA
02-004	Vent Scrubber Condenser	NA
02-006	Column Condenser	NA
02-007	Spirits Tanks	NA
02-008	Heads and Tails Tanks	NA
02-009	Receiving Cistern Tanks	NA
02-010	Beer Still Pressure Relief	NA
02-011	Doubler Still Pressure Relief	NA
02-012	Column Still Pressure Relief	NA
03-004	Distiller's Dried Grain Conveying	401 KAR 61:020
07-002	C-Fill Line	NA
07-004	F-Fill Line	NA
07-005	Blanton Fill Line	NA
07-005a	G-Fill Line	NA
07-005b	H-Fill Line	NA
07-005d	K-Fill Line	NA
07-006	Labeling/Case Sealing	NA
07-007	Case Printing	NA
09-004	Coal Stockpile	401 KAR 63:010
09-005	Total Coal Loading	401 KAR 61:020
09-006	Total Coal Bucket Elevators	401 KAR 59:010
09-007	Coal Bunker Filling	401 KAR 61:020
09-008	Ash Handling	401 KAR 61:020
09-009	Ash Loadout	401 KAR 63:010
09-010	Blended Waste Oil Tank	NA
09-011	Caustic Tanks-NaOH	NA
11-001	Unpaved Roads	401 KAR 63:010
-	Mobile Sources	401 KAR 63:010
-	Maintenance Equipment	NA

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. Particulate matter, sulfur dioxide, and visible emissions, as measured by methods referenced in Regulation 401 KAR 50:015, Section 1, shall not exceed the respective limitations specified herein.
2. In order to ensure non-applicability of Regulation 401 KAR 51:017, PSD, the permittee shall not exceed the following limitations:
 - a) The total particulate emissions from emission units 02, 04, 05, 08, and 10 shall not exceed 249 tons in any consecutive twelve month period.
 - b) The total sulfur dioxide emissions from emission units 08 and 10 shall not exceed 249 tons in any consecutive twelve month period.
 - c) The total nitrogen oxide emissions from emission units 08 and 10 shall not exceed 249 tons in any consecutive twelve month period.
 - d) The sulfur dioxide emissions from emission unit 9 shall not exceed 249 tons in any consecutive twelve month period.
 - e) The nitrogen oxide emissions from emission unit 9 shall not exceed 249 tons in any consecutive twelve month period.
- 3) The permittee shall calculate and record the actual emissions of particulate, sulfur dioxide, and nitrogen oxide from the emission units described above on a monthly basis. Additionally, the monthly emissions shall be summarized on a 12 month rolling average.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

1. Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

1. When continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place as defined in this permit, and time of sampling or measurements.
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement;
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality. [401 KAR 50:035, Permits, Section 7(1)(d)2 and 401 KAR 50:035, Permits, Section 7(2)(c)]
3. In accordance with the requirements of Regulation 401 KAR 50:035, Permits, Section 7(2)(c) the permittee shall allow the Cabinet or authorized representatives to perform the following:
 - a. Enter upon the premises where a source is located or emissions-related activity is conducted, or where records are kept;
 - b. Have access to and copy, at reasonable times, any records required by the permit:
 - i. During normal office hours, and
 - ii. During periods of emergency when prompt access to records is essential to proper assessment by the Cabinet;
 - c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit. Reasonable times shall include, but are not limited to the following:
 - i. During all hours of operation at the source,
 - ii. For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
 - iii. During an emergency; and
 - d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements. Reasonable times shall include, but are not limited to the following:
 - i. During all hours of operation at the source,
 - ii. For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
 - iii. During an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (Continued)

5. Reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be reported to the Division's Frankfort Regional Office no later than the six-month anniversary date of this permit and every six months thereafter during the life of this permit, unless otherwise stated in this permit. Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of Regulation 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to Section 6(1) of Regulation 401 KAR 50:035, Permits. All deviations from permit requirements shall be clearly identified in the reports.
6.
 - a. In accordance with the provisions of Regulation 401 KAR 50:055, Section 1 the owner or operator shall notify the Division for Air Quality's Frankfort Regional Office concerning startups, shutdowns, or malfunctions as follows:
 1. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 2. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made as promptly as possible by telephone (or other electronic media) and shall cause written notice upon request.
 - b. In accordance with the provisions of Regulation 401 KAR 50:035, Section 7(1)(e)2, the owner or operator shall promptly report deviations from permit requirements including those attributed to upset conditions to the Division for Air Quality's Frankfort Regional Office. Prompt reporting shall be defined as quarterly for any deviation related to emission standards (other than emission exceedances covered by general condition 6(a) above) and semi-annually for all other deviations from the permit requirements if not otherwise specified in the permit.
7. Pursuant to Regulation 401 KAR 50:035, Permits, Section 7(2)(b), the permittee shall certify compliance with the terms and conditions contained in this permit, annually on the permit issuance anniversary date by completing and returning a Compliance Certification Form (DEP 7007CC) (or an approved alternative) to the Division for Air Quality's Frankfort Regional Office and the U.S. EPA in accordance with the following requirements:
 - a. Identification of each term or condition of the permit that is the basis of the certification;
 - b. The compliance status regarding each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent; and
 - d. The method used for determining the compliance status for the source, currently and over the reporting period, pursuant to 401 KAR 50:035, Section 7(1)(c),(d), and (e).
 - e. The certification shall be postmarked by the thirtieth (30) day following the applicable permit issuance anniversary date.
8. In accordance with Regulation 401 KAR 50:035, Section 23, the permittee shall provide the division with all information necessary to determine its subject emissions within thirty (30) days of the date the KEIS emission report is mailed to the permittee.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (Continued)

9. Pursuant to Section VII.3 of the policy manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:016, Section 1(1), results of performance test required by this permit shall be submitted to the Division by the source or its representative within forty-five days after the completion of the fieldwork.

SECTION G - GENERAL CONDITIONS

(a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be (a) violation(s) of state regulation 401 KAR 50:035, Permits, Section 7(3)(d) and Federal Statute 42 USC 7401 through 7671q and is grounds for enforcement action including but not limited to the termination, revocation and reissuance, or revision of this permit.
2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition.
3. This permit may be revised, revoked, reopened and reissued, or terminated for cause. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to Regulation 401 KAR 50:035, Section 12(2)(c);
 - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish to the Division, in writing, information that the Division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. [401 KAR 50:035, Permits, Section 7(2)(b)3e and 401 KAR 50:035, Permits, Section 7(3)(j)]
5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority.
6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit. [401 KAR 50:035, Permits, Section 7(3)(k)]
7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance. [401 KAR 50:035, Permits, Section 7(3)(e)]

SECTION G - GENERAL CONDITIONS (Continued)

8. Except as identified as state-origin requirements in this permit, all terms and conditions contained herein shall be enforceable by the United States Environmental Protection Agency and citizens of the United States.
9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6). [401 KAR 50:035, Permits, Section 7(3)(h)]
10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [401 KAR 50:035, Permits, Section 8(3)(b)]
11. This permit shall not convey property rights or exclusive privileges. [401 KAR 50:035, Permits, Section 7 (3)(g)]
12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.
13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry. [401 KAR 50:035, Permits, Section 7(2)(b)5]
14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders. [401 KAR 50:035, Permits, Section 8(3)(a)]
15. Permit Shield: Except as provided in State Regulation 401 KAR 50:035, Permits, compliance by the emissions units listed herein with the conditions of this permit shall be deemed to be compliance with all applicable requirements identified in this permit as of the date of issuance of this permit.
16. All previously issued construction and operating permits are hereby null and void.
17. Emission limitations listed in this permit shall apply at all times except during periods of startup, shutdown, or malfunctions in accordance with Regulation 401 KAR 50:055, as long as the permittee follows the requirements of Regulation 401 KAR 50:055.
18. Pursuant to Section VII 2(1) of the policy manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:016, Section 1(1), at least one month prior to the date of the required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the Division's Frankfort Central Office. Pursuant to 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.

SECTION G - GENERAL CONDITIONS (Continued)**(b) Permit Expiration and Reapplication Requirements**

This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division. [401 KAR 50:035, Permits, Section 12]

(c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of Regulation 401 KAR 50:035, Section 15.
2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority thirty (30) days in advance of the transfer.

(d) Acid Rain Program Requirements

1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

(e) Emergency Provisions

1. An emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
 - a. An emergency occurred and the permittee can identify the cause of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
 - d. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency. The notice shall meet the requirements of 401 KAR 50:035, Permits, Section 7(1)(e)2, and include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken. This requirement does not relieve the source of any other local, state or federal notification requirements.

SECTION G - GENERAL CONDITIONS (Continued)

2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement.
3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 50:035, Permits, Section 9(3)]

(f) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall:
 - a. Submit a Risk Management Plan to U.S.EPA, Region IV with a copy to this Division and comply with the Risk Management Program by June 21, 1999 or a later date specified by the U.S.EPA.
 - b. Submit additional relevant information if requested by the Division or the U.S. EPA.

(g) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
 - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

SECTION H - ALTERNATE OPERATING SCENARIOS

None

SECTION I - COMPLIANCE SCHEDULE

None